Source of Infant Formula Data

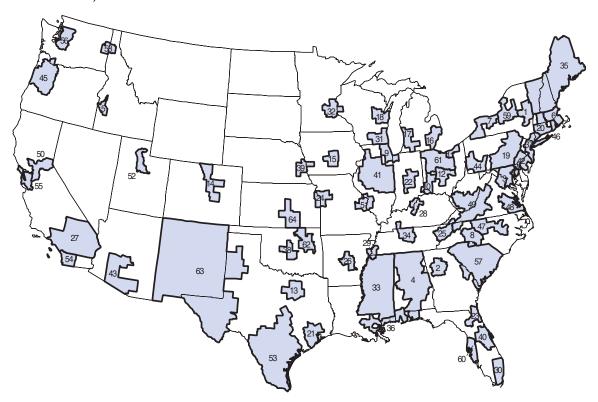
The primary source of data on the retail prices of infant formula used in the following analyses is InfoScan, a scanner-based retail sales tracking service provided by Information Resources Incorporated. InfoScan is based on weekly retail scanner information from a sample of 11,300 supermarkets, 7,500 drugstores, and 288 mass merchandisers across the United States. The retail stores in the sample are statistically selected and must meet strict data quality standards. Once a week, the sampled retailers provide retail scanner data, including the price and description of all products scanned in these stores during that week. In addition, an extensive network of professional field auditors collects weekly information on promotional activities from all sample stores. This information is used to differentiate everyday volume from volume due to promotional activity, as well as to quality-check the data and to ensure that changes in volume correlate to the relevant instore promotional activity.

After the data are reviewed and checked for errors or inconsistencies, InfoScan applies projection factors to extrapolate total volume of product sold and total dollar sales of the product for chains, market areas, regions, and the total United States. InfoScan data are averages across a specified geographic area; data from individual stores were not available for this analysis. Supermarket data, representing supermarkets that have at least \$2 million in sales annually, are projected to 64 market areas (fig. 5-1). The market areas are sets of counties selected on the basis of their retail trading environment. The market area data are then combined with data from sample stores representing the counties outside the 64 market areas to project regional and national supermarket sales. Data from mass merchandisers (stores belonging to chains that sell at least \$200 million annually) and drugstores are not projected to the market area; rather, individual store-level data are projected directly to eight standard regions that, when combined, reflect the total for the United States.

The InfoScan infant formula category includes information on dollar sales, unit sales, volume sales, and prices per unit for more than 500 distinct items. These items are unique in terms of such characteristics as product brand, package size, product form, and product base and usually conform to a unique universal product code (UPC). One exception to the correspondence of individual items and UPCs is private-label items. In this case, items are grouped by unique package characteristics. Consequently, individual private label brands or store labels are not identified. Fortunately, this does not create a problem for this study because PBM, which entered the infant formula market in 1997, was the only company marketing private-label infant formula during the study period. As a result, InfoScan private-label infant formula as well as all infant formula identified as being manufactured by Wyeth after 1996 was coded as PBM infant formula (all PBM infant formula is manufactured by Wyeth).

Each item in the infant formula category on the InfoScan data base was examined by ERS analysts and classified as to type: standard formula (382 items), specialized formula (58 items), or not infant formula (90 items). As defined in this report, standard infant formula includes milk-based and soy-based infant formulas that meet the nutritional needs of most full-term, healthy infants younger than 1 year old and is not targeted at "special needs." Specialized formula includes formula for children with special nutritional requirements, such as hypoallergenic formula (e.g., hydrolyzed-protein formula), thickened formula, formula to treat diarrhea, formula for premature babies, formula for infants with other diseases or disorders (such as PKU), lactose-free (non-soy)

Figure 5-1 Market areas, 2000



1 Albany	23 Jacksonville	45 Portland, OR
2 Atlanta	24 Kansas City	46 Providence
3 Baltimore-Washington	25 Knoxville	47 Raleigh-Greensboro
4 Birmingham-Montgomery	26 Little Rock	48 Richmond-Norfolk
5 Boise	27 Los Angeles	49 Roanoke
6 Boston	28 Louisville	50 Sacramento
7 Buffalo-Rochester	29 Memphis	51 St. Louis
8 Charlotte	30 Miami-Ft. Lauderdale	52 Salt Lake City
9 Chicago	31 Milwaukee	53 San Antonio-Corpus Christi
10 Cincinnati-Dayton	32 Minneapolis-St. Paul	54 San Diego
11 Cleveland	33 Mississippi	55 San Francisco-Oakland
12 Columbus	34 Nashville	56 Seattle-Tacoma
13 Dallas-Ft. Worth	35 New England	57 South Carolina
14 Denver	36 New Orleans-Mobile	58 Spokane
15 Des Moines	37 New York	59 Syracuse
16 Detroit	38 Oklahoma city	60 Tampa-St. Petersburg
17 Grand Rapids	39 Omaha	61 Toledo
18 Green Bay	40 Orlando	62 Tulsa
19 Harrisburg-Scranton	41 Peoria-Springfield	63 West Texas-New Mexico
20 Hartford-Springfield	42 Philadelphia	64 Wichita
21 Houston	43 Phoenix-Tuscon	
22 Indianapolis	44 Pittsburgh	
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Source: Information Resources Incorporated.

formula, as well as formula marketed to toddlers 1 year or older. In general, specialized infant formulas are not marketed to the broad population of infants under 1 year of age but rather to a particular segment of infants with special needs. In many cases, the composition and price structure of specialized formulas differs substantially from that of standard formulas. The terms "standard" and "specialized" were developed for this report to categorize these different types of infant formula. They do not coincide with categories used either for the regulation of infant formula or in the administration of the WIC infant formula rebate program.

Items determined not to be infant formula, such as Pedialyte and other electrolyte maintenance solutions, were excluded from this analysis. Each formula item was further classified as to the product base (milk, soy, or other), and product form (liquid concentrate, powder, or ready to feed). ERS further processed the InfoScan data to convert the volume measures to single strength equivalents. Each ounce of liquid concentrate is equivalent to 2 ounces of ready-to-feed formula. Conversion factors for powder formula range from 7.08 to 7.5, depending on brand and product base.

Infant formula prices reported in this study are converted to apply to a standard unit of volume, 26 ounces of ready-to-feed formula.² This volume was chosen as the standard because it is the ready-to-feed equivalent of a 13-ounce can of liquid concentrate, the unit used most often in previous studies of infant formula pricing. This conversion allows one to easily compare retail prices for different package sizes and product forms. The price is calculated by dividing dollar sales by volume sales in single-strength, ready-to-feed equivalents. This procedure creates a volume-weighted average price.

ERS obtained InfoScan quarterly data on infant formula covering the 1st quarter of 1994 through the 3rd quarter of 2000. The quarterly data were then aggregated to represent annual periods; infant formula sales and volume figures for the year 2000 were annualized based on data for the first three quarters of the year, the most recent data available at the time the study was initiated.

Limitations of the Data

One of the limitations of the data for this study is that the InfoScan data are not available at the State level. In some cases, the 64 market areas span State boundaries. Whereas 41 of the 64 market areas fall within the boundaries of a single State, the remaining 23 cover more than one State (e.g., the Philadelphia market area includes parts of Pennsylvania, New Jersey, Delaware, and Maryland). Seven States—Alaska, Hawaii, Montana, Nevada, North Dakota, South Dakota, and Wyoming—are not included in any of the 64 market areas.

Another limitation of the data for this study is that only supermarket data are projected to the market area level; sales data from drug stores and mass merchandisers are available at the national level only. Mass merchandisers and drugstores account for a considerable—and increasing—proportion of all infant formula sales, amounting to nearly 29 percent of dollar sales and 32 percent of volume sales of all infant formula in 2000.

Furthermore, the scanner data used in this report do not measure sales in other types of outlets, such as convenience and food stores with less than \$2 million in sales annually, and nonfood stores that sell baby food, such as Toys "R" Us. In addition, consumers can now order infant formula

¹ Since the focus of this report is formulas for infants, formulas for toddlers 1 year of age and older (which has a different nutrient composition than formulas for infants) were classified as specialized.

 $^{^2}$ As a result, an item's retail price as cited in this report may differ from the item's actual shelf price found in supermarkets.

through the Internet, often at a discount. The contribution of these other outlets of infant formula to total volume sales or prices is unknown but it is believed that they currently account for only a small proportion of overall sales of infant formula in the United States.

This study's analysis of InfoScan data was limited to the years 1994 through 2000. Prior to 1994, information on mass merchandisers was not collected. In addition, by 1994, most WIC State agencies (excluding Indian State agencies with 1,000 or fewer participants) with infant formula rebate operations had switched to sole-source competitive rebate systems (see appendix A).